IN THE CLAIMS

1-18.   (canceled)

19.   (currently   amended)   A   digital   broadcast   receiving apparatus ~~having~~ communicating with a hard disk drive ~~therein~~, comprising:

receiving means for receiving a stream constructed by packets of a predetermined format under control of a control means;

extracting means for extracting the packets from the packets constructing said stream received by said receiving means;

memory means for storing said extracted packets for recording;

memory control means for controlling writing said extracted packets into said memory means, for controlling reading of said stored packets from said memory means, for issuing a command to prepare transferring before an amount of said packets stored by said memory means reaches a full capacity, and for supplying a start address of said hard disk;

index adding means, residing outside a central processing unit, for adding an address of a sector of minimum unit (block) of recording on said hard disk drive as an index to said packets read out by said memory control means and for outputting said packets having the added address to said hard disk;

an arbiter for mediating said packets extracted by said extracting means and stored in said memory means, and for mediating said packets outputted from said memory means to said index adding means in response to an instruction from said memory control means; ~~and~~

packets transferring control means for permitting write access of said packets outputted from index adding means to said ~~recording means~~hard disk drive in accordance with said command from said memory control means, wherein said packets transferring control means includes address determining means for starting updating an address of said recording means when said start address is inputted from said memory control means by counting up said address of said memory means each time packets of a predetermined data amount are transferred; and

updating means for updating said set address information for DMA transfer;

wherein said index adding means adds the address including at least one of an address in said hard disk drive in which a just-previous block has been recorded, an address in said hard disk drive in which a current block is recorded, and an address in said hard disk drive in which a just-subsequent block is recorded to said block; and

wherein said updating means has an internal counter for automatically setting said address information.

20. (previously presented) A digital broadcast receiving apparatus according to claim 19, wherein

said memory means includes an input FIFO, and

said transferring of said packets is made cluster by cluster, said cluster being of a predetermined data amount.

21-24. (canceled).

25. (withdrawn) A digital broadcast receiving apparatus having a hard disk drive therein, comprising:

receiving means for receiving a stream constructed by packets of a predetermined format;

extracting means for extracting the packets which are recorded into said hard disk drive from the packets constructing said stream received by said receiving means;

memory means for storing said packets extracted by said extracting means;

a command buffer for setting address information for DMA transfer; and

adding means for adding said set address information every predetermined data amount (block) of the packets read out from said memory means.

26. (withdrawn) A digital broadcast receiving apparatus, according to claim 25, wherein said adding means adds the address information including at least one of an address in said hard disk drive in which a just-previous block has been recorded, an address in said hard disk drive in which a current block is recorded, and an address in said hard disk drive in which a just-subsequent block is recorded to said block.

27. (withdrawn) A digital broadcast receiving apparatus, according to claim 25, further comprising updating means for updating said set address information for DMA transfer.

28. (withdrawn) A digital broadcast receiving apparatus according to claim 27, wherein said updating means has an internal counter for automatically setting said address information.

29. (withdrawn) A digital broadcast receiving apparatus according to claim 28, wherein as said address information, each time the DMA transfer of one block is finished, said

internal counter is counted up and the address information of one block is set.

30. (withdrawn) A digital broadcast receiving apparatus according to claim 27, wherein said updating means updates said address information for DMA transfer when the data amount of said packets stored by said memory means reaches a predetermined capacity.

31. (withdrawn) A digital broadcast receiving apparatus according to claim 25, wherein said memory means is constructed by an input FIFO and an output FIFO.

32. (withdrawn) A digital broadcast receiving apparatus according to claim 31, further comprising updating means for updating said set address information for DMA transfer.

33. (withdrawn) A digital broadcast receiving apparatus according to claim 32, wherein said updating means updates said address information for DMA transfer when the data amount of said packets stored in said input FIFO is equal to or larger than a predetermined capacity.

34. (withdrawn) A digital broadcast receiving apparatus according to claim 32, wherein said updating means updates said address information for DMA transfer when the data amount of said packets stored in said output FIFO is equal to or smaller than a predetermined capacity.

35. (currently amended) An information processing method comprising:

receiving a stream constructed by packets of a predetermined format under control of a control means;

extracting packets from the packets constructing said received stream;

using a memory means to store said extracted packets for recording;

using a memory control means to control writing of said extracted packets into said memory means, to control reading of said stored packets from said memory means, to issue a command to prepare transferring before an amount of said packets stored by said memory means reaches a full capacity, and to supply a start address of a recording device;

using an index adding means, residing outside a central processing unit, to add an address of a sector of minimum unit of recording on a recording device as an index to said packets read out by said memory control means and to output said packets having the added said address to said recording device;

using an arbiter to mediate said packets extracted by said extracting means and stored in said memory means, and to mediate said packets outputted from said memory means to said index adding means in response to an instruction from said memory control means; and

using a packets transferring control means to permit write access of said packets outputted from said index adding means to said recording device in accordance with said command from said memory control means, wherein said packets transferring control means includes address determining means for starting updating an address of said recording means when said start address is inputted from said memory control means by counting up said address of said memory means each time packets of a predetermined data amount are transferred; and

using updating means for updating said set address
information for DMA transfer;

wherein said index adding means adds the address
including at least one of an address in said hard disk drive
in which a just-previous block has been recorded, an address
in said hard disk drive in which a current block is recorded,
and an address in said hard disk drive in which a just-
subsequent block is recorded to said block; and

wherein said updating means has an internal counter for
automatically setting said address information

36. (withdrawn) An information processing method comprising:

a receiving step of receiving a stream constructed by
packets of a predetermined format;

an extracting step of extracting the packets which are
recorded to a recording apparatus from the packets
constructing said stream received by said receiving step;

a storing step of storing said packets extracted by said
extracting step;

a setting step of setting address information for DMA
transfer by a command buffer; and

an adding step of adding said set address information
every predetermined data amount (block) of the packets read
out from said memory means.

37. (currently amended) A recording medium in which a
computer-readable program has been recorded, wherein said
program, when executed, comprises the steps of:

receiving a stream constructed by packets of a
predetermined format under control of a control means;

extracting packets from the packets constructing said received stream;

using a memory means to store said extracted packets for recording;

using a memory control means to control writing of said stored packets, to control reading of said stored packets, to issue a command to prepare transferring before an amount of said stored packets reaches a full capacity, and to supply a start address of a recording device;

using an index adding means residing outside a central processing unit, adding an address of a sector of minimum unit of recording on a recording device as an index to said packets read out by said memory control means and for outputting said packets having the added address to said recording device;

using an arbiter to mediate said packets extracted by said extracting means and stored in said memory means, and to mediate said packets outputted from said memory means to said index adding means in response to an instruction from said memory control means; and

a packets transferring control means to permit write access of said packets outputted from said index adding means to said recording device in accordance with said command from said memory control means, wherein said packets transferring control means includes address determining means for starting updating an address of said recording means when said start address is inputted from said memory control means by counting up said address of said memory means each time packets of a predetermined data amount are transferred; and

using updating means for updating said set address information for DMA transfer;

wherein said index adding means adds the address including at least one of an address in said hard disk drive

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in which a just-previous block has been recorded, an address in said hard disk drive in which a current block is recorded, and an address in said hard disk drive in which a just-subsequent block is recorded to said block; and

wherein said updating means has an internal counter for automatically setting said address information.

38. (withdrawn) A recording medium in which a computer-readable program has been recorded, wherein said program comprises:

a receiving step of receiving a stream constructed by packets of a predetermined format;

an extracting step of extracting the packets which are recorded to a recording apparatus from the packets constructing said stream received by said receiving step;

a storing step of storing said packets extracted by said extracting step;

a setting step of setting address information for DMA transfer by a command buffer; and

an adding step of adding said set address information every predetermined data amount (block) of the packets read out from said memory means.

39. (canceled)

40. (canceled)

41. (currently amended) An information processing apparatus according to claim 2 20, wherein

said input FIFO sequentially stores said packets for recording and outputs said packets in storing order.

42. (canceled)

43. (previously presented) A digital broadcasting receiving apparatus according to claim 20, wherein

said input FIFO sequentially stores said packets for recording and outputs said packets in storing order.

44. (canceled)

45. (previously presented) An information processing method according to claim 35, wherein

said storing said packets for recording includes storing said packets into an input FIFO, and

said transferring of said packets is made cluster by cluster, said cluster being of a predetermined data amount.

46. (previously presented) An information processing method according to claim 45, wherein
said input FIFO sequentially stores said packets for recording and outputs said packets in storing order.

47. (canceled)

48. (previously presented) A recording medium in which a computer-program readable program has been recorded according to claim 37, wherein

storing said packets for recording includes storing said packets into an input FIFO, and

said transferring of said packets is made cluster by cluster, said cluster being of a predetermined data amount.

49. (previously presented) A recording medium in which a computer-program readable program has been recorded according to claim 48, wherein
said input FIFO sequentially stores said packets for recording and outputs said packets in storing order.

50. (canceled)

51. (currently amended) An information processing apparatus according to claim 1 19, wherein said packets transferring control means further includes a register for memory address comparison, wherein a maximum address of the memory may be set in said register, and wherein the memory address may be automatically returned to the start address after counting-up to the maximum address.